

Design Update 2005-2  
4/1/05

### 1) Pavement Cleaning

Pavement cleaning is required on all HMA resurfacing projects, see the Road Design Manual 6.03.04 section B 2 for more detail.

### 2) Temporary Signs

All projects with temporary signs need to include typical M000ae (Ground Driven Sign Supports For Temporary Signs) in their maintaining traffic write up.

### 3) Sign Supports

All projects that require sign support typicals must include full size plans of the typicals in the plans, no 8 ½ x 11 copies in the proposal. Log projects can use 8 ½ x 11 sheets. Get sign typicals from the Traffic & Safety website.

### 4) Horizontal Curve Data

I have attached an excel file that calculates curve variables based upon the deflection angle, the station of the P.C., P.I., or the P.T. and the radius & coordinates of the curve. Any questions on the spreadsheet call Carl Anderson at (517) 373-0069.

[Horizontal Curve Calcs.xls](#)

### 5) Vertical Curve Data

I have attached an excel file that calculates vertical curve stationing and elevations for curves up to 2000 feet in length. Any questions on the spreadsheet call Carl Anderson (517) 373-0069.

[Vertical Curve Calc.xls](#)

### 6) Replacing bridges with culverts

When replacing bridges with culverts, the designer should send off the attached form to request the proper inventory designation from Bridge Management Unit at C&T. Culverts designed as culverts, but spanning water with a span 10' or greater should have a (C0\_of Control Section) designation. Bridges are bridges regardless of span length (old 20' span rule no longer in effect). This allows for the structures and large culverts to be on the inventory and get inspected.

[New Structure Number Request Form.doc](#)

## 7) Structure Remove

Removing portions of structures for say existing 6'x4'slab culverts should use a pay item of "**Structures, Rem Portions (Culv 1)**" in Transport. Attach a copy of the old Std. Plan (IV-93 series slab or IV-94 series box culvert) and crosshatch the removal and label as "For Information Only". The old Std. Plan can be found by the following:

1. Map a drive to AsBuiltPlans on Michtrans7\U01\Design
2. Click on 99Misc
3. Click on Standard Plans
4. Click on STANDARD ROAD ENGLISH ROMAN NUMERAL SERIES
5. Then click on the ROMAN NUMERAL you need.

## 8) Resurfacing or adding HMA to bridges

Designers when resurfacing over bridges, or adding HMA over bridges, the capacity of the bridge needs to be reviewed by Robert Kelly out at C&T.

9) If you know of new people in your TSC or Region that are not receiving this update that should, please let me (Gary Mazurek) know so they can be added to my list.

Regards,

Joel Ingle, Supervising OEC Plan Review Engineer

Tom VandenBerg, Supervising Plan Review Engineer

Gary Mazurek, OEC Plan Review

Carl Anderson, OEC Plan Review

Keith Claus, Road Plan Review

Jennifer Transue, OEC Bridge Plan Review

Radka Todorova, Bridge Plan Review